



## Biomedical Informatics Special Seminar



*Zhaozheng Yin, PhD; Associate Professor, Department of Computer Science at Missouri University of Science and Technology*

### Keeping Optics and Human in the Loop of Biomedical Image Analysis Algorithms

Thursday, Apr 4, 2019 2 pm—3 pm

BMI Conference Room HSC-L3 Room 045

#### Abstract:

While a lot of efforts have been made on developing computer vision and machine learning algorithms to analyze biomedical images, little attention is being paid to the physical image formation process and human-aided discovery. In this project, we demonstrate how optics and human in the loop can facilitate the development of biomedical image analysis algorithms and boost the algorithm's performance.

In the second part of the talk, some current and future projects we are exploring will be introduced briefly, including infrastructure inspection by robotic exploration, cyber physical systems for smart manufacturing, intelligent human-robot collaboration for smart factories, data analytics for precision agriculture, social intelligent computing, and multi-modal product understanding in E-Commerce at Alibaba Group.

#### Bio:

Zhaozheng Yin is a faculty member in the Department of Computer Science at Missouri University of Science and Technology (formerly, University of Missouri - Rolla). With research interests in Biomedical Image Analysis, Computer Vision and Machine Learning, his group has published eighty papers including some paper awards, such as CVPR Best Doctoral Spotlight Award in 2009, MICCAI Young Scientist Award in 2012 (Runner-ups in 2010 and 2015), and four papers in the special issue of Best MICCAI Papers in the journal of Medical Image Analysis. He received the NSF CAREER award in 2014 and served as an Area Chair of CVPR2017, MICCAI2015, and WACV2016/2018/2019.

Questions? Please call the Biomedical Informatics Department at 631-638-2590.